XXX.—Description of a new Species of Palophus (Phasmidæ) from West Africa. By W. F. KIRBY, F.L.S., F.E.S.

LARGE Phasmidæ are probably numerous in Africa, but they are at present usually received only as single unpaired specimens, and are very little known. Herewith I describe a male specimen lately received from West Africa, allied to *Palophus centaurus* of Westwood, and associate with it, with some slight hesitation, a specimen which has been in the Natural History Museum for some years, included in the series of *P. centaurus*, from which it appears to be distinct, though the differences are less salient than in the male.

Palophus Alldridgei, sp. n.

Dimensions (3).

	mm
Long. corporis (circa)	190^{-1}
" capitis	5
,, cornu	5
" pronoti	7
" mesonoti	27
" metanoti	10
., segm. med	13
"tegm	16
Exp. al.	190
Long. fem. ant.	51
" " " med	38
" " post	45

Dimensions (\circ).

															10111.
Long.	corp	oris								• •					230
27	capit	tis			• •		• •								8
22	com	и.,								• •					9
2.9	pror														91
,,	meso														.1.1
22	meta														15
"	segn	1. m	ed.		• •		• •						• •		20
	tegn														25
Exp. a	ıl	• • •				•		• •			• •			• •	175
Long.															-63
79	>>	me	1			•		• •	•			•			+4.5
22	22	pos	t	•			• •	• •			• •			• •	-50

Male.—Almost uniform wood-brown. Head with a double laminated crest, slightly oblique, trifid above, and slightly dentated in front; behind it is a short, pointed, conical tubercle on each side, and several smaller pointed tubercles. Median

segment trifid, with the middle section pointed in front, as in P. centaurus 3. Front femora and tibiæ hardly curved, the others more or less so; four hinder tibiæ with an oval lamella near the extremity above, which is rudimentary on the front tibiæ; middle femora with a large single or double laminated and rectangular projection near the base; righthand tibia with a small tooth on the under surface just beyond the lamella. Tegmina brown, blackish in the middle, with ill-defined white spaces towards the base, and near the middle of the costa. Coriaceous portion of the wings wood-brown, with blackish, occasionally interrupted, lines on the longitudinal nervures. Membranous portion of the wing hyaline, nearly the apical third (from about one third of the length on the costal side to about two fifths of the length of the hind margin) reticulated with light brown, and large partly connected white spots and markings, irregularly arranged in rows. The inner oblique border of this tessellated area becomes indistinct and irregular, fading into the hyaline pertion of the wing.

Hab. Bonthe, Sherbro, W. C. Africa.

This specimen was found by Mr. T. J. Alldridge (after whom I have named it at his request) in his bedroom at Bonthe, and kindly presented by him to the Museum. The male is allied to *Palophus centaurus*, Westw., but longer, more slender, and with variegated wings. From *P. hippotaurus*, Karsch (which, judging from the description, I refer to *Bactrododema*, Stål), which it resembles in wing-coloration, it differs by its unarmed thorax. The males of *P. centaurus* in the Museum have the tips of the wings only slightly clouded, much less so than in the insect described and figured by Brongniart (Nouv. Arch. Mus. Paris, (3) iii. p. 197, pl. viii., 1892), which has the outer subcostal area of the wings tessellated, and perhaps belongs neither to *P. centaurus* nor to *P. Alldridgei*. The exact locality of Brongniart's specimen is not stated.

Female.—Light greyish brown; head with an erect double lamellated crest, tridentate above and slightly dentated in front; behind its base are two rows of raised spines on each side, the front and inner ones longest. Mesothorax with a short black dash on each side about the middle, but asymmetrical. Abdomen with a slight double lamella on the fifth segment. Front femora with a row of undulated lamellæ above and two near the middle on the outer side; tibiæ with three more distinct double ones on the outer and two smaller ones on the inner side (tarsi wanting). Middle and hind femora and tibiæ much arched, the femora with a large lamella above and below near the base; tibiæ with several small and irregular lamellæ. Tegmina wood-brown, more strongly humped than in the male, blackish on the hump, and whitish towards the base. Wings as in the male, except that the whole membranous area is brown, tessellated with irregular rows of large subhyaline spots.

Hab. W. Africa (Swanzy).

In the true *P. centaurus* the wings of the female are blackish, with the subhyaline spots much more numerous, much smaller, less confluent, and more regular.

XXXI.—Descriptions of new West-African Frogs of the Genera Petropedetes and Bulua. By G. A. BOULENGER, F.R.S.

A FEW years ago * I had occasion to offer some remarks on the genus Petropedetes, Reichenow, and pointed out the differential characters of the three species then known, all three from West Africa, viz. P. cameronensis, Reichen., the type of the genus, with the toes half-webbed and the tympanum half the diameter of the eye; P. Johnstoni, Blgr., with a mere rudiment of web between the toes, and the tympanum half the diameter of the eye; and P. (Tympanoceros) Newtoni, Bocage, with a mere rudiment of web between the toes and with a very large tympanum, remarkable for the presence, in the male, of a dermal appendage projecting from its centre. I have since received examples of two new species, differing from those previously described in the fully webbed toes, and for these I propose the names P. natator and P. palmipes; the former is from Sierra Leone, the latter from South Cameroon. The genus Bulua was described by me quite recently † for a new frog from South Cameroon, B. ventrimarmorata; a second species, from the same country, may now be added, and is here described as B. albiventris.

Petropedetes natator.

Tongue rather feebly notched behind, without conical papilla. Vomerine teeth in two small groups close together behind the level of the choanæ. Head strongly depressed, a little broader than long; snout rounded, shorter than the

* P. Z. S. 1900, p. 439.

† Ann. & Mag. Nat. Hist (7) xiii. 1904, p. 262. Ann. & Mag. N. Hist. Ser. 7, Vol. xv. 20